

## REMARKS

This application has been reviewed in light of the Office Action dated January 5, 2007. Claims 1, 4-7, 9-17, 19, 21, 23, 25-36, 40, 41, 44-50, 52-58 are presented for examination. Claims 1, 31, and 52, the independent claims, have been amended to define still more clearly what Applicant regard as his invention. Claims 55-59 have been amended to correct claim numbering and corresponding, claim dependency. No change in scope is either intended or believed effected by at least these latter changes. Favorable reconsideration is requested.

The Examiner objected to the numbering of the claims as not being in accordance with 37 C.F.R. 1.126, requiring the original numbering of the claims to be preserved throughout the prosecution. Claims 53 (second occurrence) through 58 have been renumbered as claims 54-59. The claim dependency, as appropriate, has also been amended in these claims. It is believed this action obviates the objection, and Applicant respectfully requests its withdrawal.

Claims 1, 4, 19, and 21 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,902,233 to Farley et al. ("the '233 patent").

Claims 5 and 6 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the '233 patent, in view of U.S. Patent No. 5,944,736 to Taylor et al. ("the '736 patent").

Claims 7 and 9-13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the '233 patent, in view of U.S. Patent No. 5,558,622 to Greenberg ("the '622 patent").

Claims 14-17, 23, 25-27, and 52-58 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the '233 patent, in view of U.S. Patent No. 4,905,670 to Adair ("the '670 patent").

Claims 28 and 29 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the '233 patent and knowledge of one having ordinary skill in the art at the time.

Claim 30 was rejected under 35 U.S.C. § 103(a) as being unpatentable over the '233 patent, in view of U.S. Patent No. 6,228,025 to Hipps et al. ("the '025 patent").

Claims 31-36, 40, 41, 44-47, and 49 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the '233 patent in view of the '622 patent as applied to claims 7-13 and further in view of the '670 patent.

Claim 48 was rejected under 35 U.S.C. § 103(a) as being unpatentable over the '233 patent in view of the '622 patent, and further in view of the '670 patent as applied to claim 31 and further in view Swaniger.<sup>1</sup>

As shown above, Applicant has amended independent claims 1, 31, and 52 in terms that more clearly define what he regards as his invention. Applicant submits that these amended independent claims, together with the remaining claims dependent thereon, are patentably distinct from the cited prior art for at least the following reasons.

#### **REJECTION OF INDEPENDENT CLAIM 1**

Claim 1 was rejected under 35 U.S.C. §102(b) as being anticipated by the '233 patent. Claim 1 is directed to a surgical retractor comprising a handle having a longitudinal axis and proximal and distal ends, a first coupling mechanism adjacent the proximal end of the handle. The first coupling mechanism includes a knob having a bore and the knob is rotatable about the longitudinal axis of the handle. The surgical retractor also includes a blade member having a proximal end and a distal end. The blade member comprises a coupling element, and the coupling element is configured and dimensioned to be received in the bore of the knob. A feature of claim 1 is that the knob is rotatable about the longitudinal axis of the handle. Support for this feature may be found at least in Figures 1-3 and on page 8, lines 24-26, of the

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<sup>1</sup> The Examiner did not provide a patent number or otherwise identify the Swaniger reference. Accordingly, Applicant is unable to appreciate or consider the Swaniger reference until such time as the Examiner identifies the reference.

specification, which states that the knob 26 is preferably rotatably coupled to handle 12 via axle 32. As is evident in Figure 1, the knob 26 is rotatable about longitudinal axis 11 of handle 12.

The '233 patent, as understood by Applicant, relates to a surgical apparatus for retracting anatomy. In the Office Action, the Examiner identifies a knob in Figure 10 as element 31 and a bore as element 33. Applicant believes the Examiner meant to indicate that the knob is identified as element 34, because element 31 is directed to a nipple on blade 9. The Examiner further points to Figure 6 of the '233 patent as disclosing the feature that the knob is rotatable with respect to the handle. As noted above, claim 1 has been amended to recite that the knob is rotatable about the longitudinal axis of the handle. As is evident from Figure 6 of the '233 patent projection 34 pivots about spring-and-ball structure 46. That is, the projection 34 does not rotate about (or around) the longitudinal axis of the handle, rather it pivots along the longitudinal axis of the handle. Applicant believes there to be no disclosure, teaching or suggestion in the '233 patent of a coupling mechanism having a knob with a bore, the knob is rotatable about the longitudinal axis of the handle.

Accordingly, Applicant submits that claim 1 is not anticipated by the '233 patent, and respectfully requests withdrawal of the rejection under 35 U.S.C. § 102(b).

### **REJECTION OF CLAIM 31**

Claim 31 was rejected under 35 U.S.C. §103(a) as being unpatentable over the '233 patent in view of the '622 patent, and further in view of the '670 patent. Claim 31 is directed to a method for treating bone. The method includes the step of providing a surgical retractor which includes a handle having a longitudinal axis and proximal and distal ends, a first coupling mechanism adjacent the proximal end of the handle, where the first coupling mechanism comprises a knob having a threaded axial bore and the knob is rotatable about the longitudinal

axis of the handle. The surgical retractor further includes a blade member having a proximal end and a distal end, where the blade member comprises a threaded coupling element, and the threaded coupling element is configured and dimensioned to be received in the threaded axial bore of the knob. The method further includes the steps of positioning an endoscope with respect to the blade member for viewing a surgical site, making an incision in soft tissue and elevating the soft tissue fascia off a bone segment proximate the surgical site, passing a portion of the blade member through the incision, retracting the fascia off the bone segment with the blade member to form a cavity, circumventing at least in part a bone segment with a portion of the blade member, stabilizing the blade member on the bone segment, viewing the bone segment through the endoscope, and performing a surgical procedure proximate the bone segment.

Features of note in claim 31 are that the first coupling mechanism comprises a knob having a threaded axial bore and the knob is rotatable about the longitudinal axis of the handle, and a blade member having a threaded coupling element where the threaded coupling element is configured and dimensioned to be received in the threaded axial bore of the knob.

Applicant respectfully submits that a combination of the '233 patent, the '622 patent nor the '670 patent discloses, assuming such combination would even be permissible, teaches or suggests all of the limitations of claim 31. Specifically, there is no disclosure, teaching or suggestion in these patents of a coupling mechanism comprises a knob having a threaded axial bore and the knob is rotatable about the longitudinal axis of the handle, as well as a blade member having a threaded coupling element where the threaded coupling element is configured and dimensioned to be received in the threaded axial bore of the knob.

Accordingly, Applicant submits that claim 31 is patentable over the cited art, and respectfully request withdrawal of the rejection under 35 U.S.C. § 103(a).

## **REJECTION OF CLAIM 52**

Claim 52 was rejected under 35 U.S.C. § 103(a) as being unpatentable over the '233 patent, in view of the '670 patent.

Claim 52 is directed towards a surgical retractor comprising a handle having a longitudinal axis, a proximal end, a distal end and an opening, a first coupling mechanism adjacent the proximal end of the handle, where the first coupling mechanism is rotatable about the longitudinal axis of the handle, a second coupling mechanism proximate the proximal end of the handle having a through-hole and at least a portion which is axially moveable within the opening of the handle. The through-hole of the second coupling mechanism is sized and configured to receive a surgical instrument. The surgical retractor further includes a blade member having a proximal end and a distal end. The blade member comprises a coupling element proximate the proximal end of the blade member, and the coupling element is configured and dimensioned to connect with the first coupling mechanism.

Features of note in claim 52 are that the first coupling mechanism is rotatable about the longitudinal axis of the handle, and second coupling mechanism, proximate the proximal end of the handle, has a through-hole which is sized and configured to receive a surgical instrument.

The Examiner states that the '233 patent discloses all the features of claim 52 except for the second coupling mechanism including a coupling member, a second member and a recess for attachment of an endoscope. For at least the reasons given with respect to claim 1 above, the '233 patent fails to disclose, teach or suggest a coupling mechanism having a knob with a bore, where the knob is rotatable about the longitudinal axis of the handle. The '670 patent fails to remedy the deficiency of the '233 patent.

As noted above, the Examiner states that the '670 patent discloses a recess for attachment of a endoscope. He further states that the coupling member of the '670 patent, reference designator 36 in Figure 4 comprises numerous small recesses, or through holes, for clamping to a portion of the endoscope (Figure 4, reference designator 40). Applicant respectfully points out that reference designator 36 of the '670 patent is a "worm gear" and reference 40 is a "rack". A "worm gear" is a type of gear that consists of a cylinder with a spiral groove on a shaft. The teeth of rack 40 engage worm gear 36. A control shaft 42 is attached to pin 38 and has a knob 44 for rotating worm gear 36 and thereby adjusting camera 32 longitudinally along guide 34. This provides means for focusing the camera (Col. 3, lines 45-49).

Applicant presumes that the numerous small recesses noted in the Office Action refers to the spiral groove of the "worm gear" 36. Applicant, however, fails to understand how the Examiner equates small recesses (grooves) with through holes, where a hole has a 360 degree border. Recesses or grooves, on the other hand, are not enclose by 360 degree border/diameter. Applicant submits that the '670 fails to disclosure, teach or suggest a second coupling mechanism, proximate the proximal end of the handle, has a through-hole which is sized and configured to receive a surgical instrument, as recited in claim 52.

For at least the reasons discussed above, Applicant submits that the '233 patent and the '670 patent whether considered separately or in combination, assuming such combination would even be permissible, would fail to teach or suggest a first coupling mechanism is rotatable about the longitudinal axis of the handle, and a second coupling mechanism, proximate the proximal end of the handle, has a through-hole which is sized and configured to receive a surgical instrument.

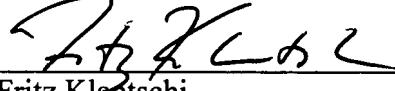
Accordingly, Applicant submits that claim 52 is patentable over the cited art, and respectfully request withdrawal of the rejection under 35 U.S.C. § 103(a).

The other claims in this application are each dependent from one or another of the independent claims discussed above and are therefore believed patentable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual consideration or reconsideration, as the case may be, of the patentability of each on its own merits is respectfully requested.

In view of the foregoing amendments and remarks, Applicant respectfully requests favorable reconsideration and early passage to issue of the present application. Should the Examiner have any questions or comments concerning this submission, he is invited to call the undersigned at the phone number identified below.

Respectfully submitted,

Date: May 3, 2007



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